



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY
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OFFICE OF
AIR AND RADIATION

May 10, 2001

CCD-01-08 (LDV/LDT/SM/ICI/LIMO)

Dear Manufacturer:

SUBJECT: Fuel Economy Label Information for 2002 Model Year

Enclosed with this letter are the following documents designed to guide you in your 2002 model year fuel economy program.

Enclosure 1

"Fuel Economy Supplementary Information for 2002 Model Year" contains the fuel cost, Gas Guzzler Tax schedule, and fuel economy range information necessary to print the fuel economy labels. Enclosure 1 also requests that manufacturers include the DOE/EPA Fuel Economy Guide web site address on the border of the fuel economy labels.

Enclosure 2

Enclosure 2 provides instructions for submitting information to EPA for the Guide for alternative-fueled vehicles, electric vehicles, minivans, and sport utility vehicles.

Enclosure 3

Enclosure 3 is a "timetable" which contains the timetable for inclusions of label values in the 2002 model year Fuel Economy Guide.

This letter establishes official 2002 model year fuel costs which are different than the interim values used by some manufacturers. [Interim fuel costs are used when 2002 vehicles are offered for sale before the 2002 fuel costs are available.] Manufacturers may continue using interim values (i.e. 2001 values) on currently approved labels until September 1, 2001. Manufacturers may update their currently approved labels sooner. All labels approved after July 1, 2001 should use the new fuel costs.

If you have any questions, please contact your certification team representative.

Sincerely,

A handwritten signature in black ink, appearing to read "Gregory A. Green", is positioned above the typed name.

Gregory A. Green, Director
Certification and Compliance Division
Office of Transportation and Air Quality

Enclosures

cc: D. Rodgers, DOE

ENCLOSURE 1

Fuel Economy Supplementary Information for 2002 Model Year

Annual Fuel Cost Estimations

Annual fuel cost estimates used on fuel economy labels (window stickers of new vehicles) are based on the following fuel costs:

Regular Unleaded Gasoline	\$1.50	per gallon
Premium Unleaded Gasoline	\$1.65	per gallon
Diesel Fuel	\$1.45	per gallon
M85	\$1.80	per gallon
E85	\$2.45	per gallon
LPG	\$1.90	per gallon
CNG	\$1.40	per gallon equivalent
Electricity	\$0.05, 0.10, 0.15	per kilowatt-hour

The annual fuel cost estimations should be calculated based on 15,000 annual vehicle miles, the above listed fuel cost and the adjusted combined mpg (.55/.45 weighting of the adjusted city and highway FE's, then rounded to a whole mpg). Fuel cost for electric vehicles should be shown for the three electricity costs, because of the wide range of electricity costs throughout the United States.

Fuel Economy Ranges

The publication of the initial ranges as required by 40 CFR 600.314-86(d), will occur at the same time the Guide is released for publication. These ranges shall be applied to all vehicles manufactured more than 15 days after the ranges are available [Ref.: 40 CFR 600.306-86(b)].

Pursuant to 40 CFR 600.314-86(d), we will publish an updated version of all the ranges in February, 2002. This corresponds to the historical date of the second edition of the Guide. All vehicles must be labeled with the updated ranges within 15 days.

Labels issued after release of the initial or updated ranges should include the latest available range of fuel economy for that class of vehicle. After the ranges are initially available, the computer issued receipt will contain the ranges. The receipt will be automatically generated for manufacturers electronically transmitting FE data; other manufacturers can obtain this receipt from your certification team representative after the FE data has been entered. Separate ranges of adjusted city and highway FE values will be given.

Release Date

EPA will consider manufacturer-calculated label values as confidential until the release date specified by the manufacturer. The release date should be the date of introduction or press release or inclusion in the fuel economy Guide, whichever is earlier.

Printed Fuel Economy Guide - 1st Edition

It is EPA's intention to include in the printed Guide all manufacturers' label values according to the schedule contained in Enclosure 3. If the manufacturer wishes to exclude a model type from the Guide, a request providing justification for the exclusion must be submitted to EPA. Printed Guides will be mailed to automobile dealerships in October or early November.

Printed Fuel Economy Guide - 2nd Edition

EPA and DOE do not intend to publish a printed copy of the second edition of the Guide in February, as has been done in the past. Instead, we intend to update the web site several times during the year.

EPA Press Release

Each year, EPA releases the Fuel Economy Guide to the press around the time new models are first offered for sale. Our press release typically occurs in the last part of September or early October, and typically includes all the information in the printed Guide, plus some general information about some of the highest and lowest fuel economy cars and trucks. This year, we are considering the possibility of moving the date of the press release up by two weeks, to approximately September 15, 2001.

EPA/DOE Fuel Economy Web Site (www.fueleconomy.gov)

The EPA and the Department of Energy (DOE) have developed a combined fuel economy web site, www.fueleconomy.gov. The web site contains all the information in the printed Guide, plus tips and other general information about the fuel economy of passenger cars and light trucks. After the EPA press release, EPA will place a copy of the updated Guide information on the web site. The site will be updated periodically throughout the year.

EPA encourages automobile manufacturers (and dealers) to link their web sites to the EPA/DOE site, as a public reference for fuel economy of passenger cars and light-duty trucks.

Displaying Web Site Address on FE Labels (Window Stickers)

EPA requests that manufacturers include the EPA/DOE web site address (www.fueleconomy.gov) in a highly visible place on the label, preferably on the border of the label, in lower case letters which are in the same bold condensed type as the words "FREE FUEL ECONOMY GUIDE."

Gas Guzzler Tax

If, according to your calculations, one or more of your model types are subject to the Gas Guzzler Tax, those model types are noted by the letter "G" in the engine description section of the Fuel Economy Guide.

The total amount of tax is determined by the Internal Revenue Service (IRS). The manufacturer is responsible to the IRS for reporting and paying the Gas Guzzler Tax. The tax shown in the table below must be used on the label unless the manufacturer has been granted an alternative tax rate schedule. However, the IRS may audit your records and make their own determination about your tax liability. If the IRS determines a different tax rate after the model year, you will not be required to relabel unsold vehicles.

Use the following table to determine the tax liability for "Guzzler" model types.

FUEL ECONOMY VALUE TAX

<u>MPG</u> * is at least:	21.5 but < 22.5	\$1,000 per vehicle **
	20.5 but < 21.5	1,300
	19.5 but < 20.5	1,700
	18.5 but < 19.5	2,100
	17.5 but < 18.5	2,600
	16.5 but < 17.5	3,000
	15.5 but < 16.5	3,700
	14.5 but < 15.5	4,500
	13.5 but < 14.5	5,400
	12.5 but < 13.5	6,400
	less than 12.5	7,700

* Combined unadjusted model type fuel economy

** In general, the gas guzzler tax applies to each vehicle introduced into commerce, including vehicles which are leased or sold to consumers.

Limousine Manufacturers

Under the Revenue Consolidation Act of 1991, limousine manufacturers and modifiers are covered by the gas guzzler program. Manufacturers of such vehicles should obtain fuel economy labels for their vehicles and conversions.

ENCLOSURE 2

Additional Instructions for Submitting Fuel Economy Information to EPA for the 2002 Fuel Economy Guide

[Changes in this section from 2001 model year are highlighted in bold type.]

1. Background Information

In the last several years, the Fuel Economy Guide contained separate sections for vehicles operated on the following fuels:

Gasoline
Diesel fuel
Ethanol (E85)
Compressed Natural Gas (CNG)
Electricity
Hybrid vehicles
Other Fuels

For dual-fueled vehicles, the gasoline mpg values for the vehicle were listed in both the Gasoline section of the Guide and the appropriate alternative-fuel section of the Guide.

For the 2002 Guide, we may list all vehicles together except electric vehicles. We believe this change will help consumers to find alternative fuel vehicles and compare their fuel economy with gasoline vehicles more conveniently through "one stop shopping."

2. Subdividing "Special Purpose Vehicles" into Minivans and SUVs

The 2002 Fuel Economy Guide will subdivide the Special Purpose Vehicle class into the following sub-categories:

Special Purpose Vehicle - Minivan - 2WD;
Special Purpose Vehicle - Minivan - 4WD;
Special Purpose Vehicle - Sport Utility Vehicle - 2WD; and
Special Purpose Vehicle - Sport Utility Vehicle - 4WD.

Manufacturers should subdivide their Special Purpose Vehicles into Minivans and Sport Utility Vehicles (SUVs) by entering the appropriate carline class code into the carline program of the EPA database (column 21-22 of the C1 record). With EPA approval, a vehicle may continue to be listed in the Guide as a "Special Purpose Vehicle" if it does not seem to fit into one of these subcategories. This situation is expected to be rare, but may occasionally happen for some types of camper vans, dune buggies, amphibious vehicles, or other special vehicles.

In addition, for the 2002 model year Guide we are considering subdividing SUVs (both 2WD and 4WD) into three or four sub-categories based on the certification vehicle classifications (e.g. LDT1, LDT2, LDT3 and LDT4). We believe this change will enhance the comparison of fuel economy of these vehicles.

The subcategories of "Special Purpose Vehicles" will be used in the Guide only, and should not be used on the fuel economy label (window sticker) required by the provisions of 40 CFR 600.306-86. As in previous years, the fuel economy labels for most Minivans and SUVs should identify these vehicles as "Special Purpose Vehicles." Similarly, EPA will provide fuel economy ranges of comparable vehicles for "Special Purpose Vehicles" only, and not for any of the subcategories.

Guidance for Listing Vehicles equipped with Semi-Automatic Transmissions in the Guide

If you are planning to incorporate any semi-automatic transmissions¹ or automatic variable gear ratio transmissions (continuously variable transmissions) in your product plans, when filling out the general label information in the CFEIS Manufacturers Users Guide (CMUG), please mark them with the appropriate code for the General Label input data G2 record, position 7-8, as shown below. However, for the Vehicle Information input record (V5 record, column 52-53) the transmission code should indicate how the vehicle is actually tested, i.e. in the automatic or manual mode.

- AV - Automatic Variable Gear Ratios
- A3 - No Lockup/Automatic/3-speed
- A4 - No Lockup/Automatic/4-speed
- A5 - No Lockup/Automatic/5-speed
- A6 - No Lockup/Automatic/6-speed
- B3 - Both C4 & M3
- B4 - Both C5 & M4
- C4 - Creeper/Manual 4-speed
- C5 - Creeper/Manual 5-speed
- L3 - Lockup/Automatic/3-speed
- L4 - Lockup/Automatic/4-speed
- L5 - Lockup/Automatic/5-speed
- M3 - Manual 3-speed
- M4 - No Creeper/Manual 4-speed
- M5 - Manual 5-speed
- M6 - Manual 6-speed
- S2 - Semi-Automatic 2-speed
- S3 - Semi-Automatic 3-speed
- S4 - Semi-Automatic 4-speed
- S5 - Semi-Automatic 5-speed
- S6 - Semi-Automatic 6-speed

¹ A semi-automatic transmission is a transmission which can easily be shifted in either the automatic or manual mode. For example, some semi-automatic vehicles can be shifted by (+/-) buttons located on the steering wheel; a stalk or paddles located on the steering column; or by placing the floor mounted shift lever in a special (+/-) position which transforms the gear lever into a toggle switch that is designed to perform up shifts and downshifts manually.

4. Guidance for Listing Alternative-Fueled Vehicles in the Guide

The Fuel Economy Guide will include new alternative-fueled vehicles, including CNG vehicles, ethanol vehicles and other types of alternative-fueled vehicles. For CNG and ethanol vehicles manufacturers should enter the fuel economy label values of these alternative-fueled vehicles into the EPA computer database, **listing the driving range in the engine block descriptor field (G1 record column 47-56).*** For LPG (propane) and electric vehicles, manufacturers should provide the necessary fuel economy information, driving range information, and a description of the vehicles to EPA in writing to the attention of their EPA certification team member. **If the city and highway fuel economy values and driving range will not be available by August 29, manufacturers should submit a description of the vehicle to their EPA team member with the fuel economy and driving range listed as "NA" (not available).***

For dual-fueled vehicles, manufacturers should provide fuel economy (mpg) values when the vehicle is operated on both fuels. For example, manufacturers should provide both gasoline and ethanol (E85) mpg values for flexible-fueled ethanol vehicles.

Manufacturers should provide the driving range of dedicated alternative-fueled vehicles (rounded to the nearest 10 miles). For dual-fueled vehicles, manufacturers should provide the driving range of the vehicle when operated on gasoline or diesel fuel and the driving range when operated on the alternative fuel.

The driving range should be based on the adjusted combined fuel economy value as determined in 40 CFR 600.209-95(d) and the nominal fuel tank capacity of the vehicle (rounded to the nearest tenth of a gallon). If several fuel tank capacities are available for a vehicle, manufacturers should provide the driving range and the fuel tank capacity for all available fuel tank capacities for the vehicle.

For CNG vehicles, manufacturers should provide the city and highway fuel economy values in miles per gallon-equivalent, where one gallon-equivalent is equal to 121.5 cubic feet of CNG. The CNG fuel tank capacity used to calculate the driving range should be based on 80 percent of the nominal fuel tank capacity (using a slow fill rate) in order to account for the reduced fuel tank capacity which results from a fast fill rate.

5. Guidance for Listing Electric Vehicles in the Guide

The Fuel Economy Guide will likely include a separate section for new electric vehicles. If manufacturers have not already done so, they should provide a list of electric vehicles which will be introduced into commerce in the next year. **If the energy consumption and driving range will not be available by August 29, manufacturers should submit a description of the vehicle with the energy consumption and driving range values listed as "NA" (not available).** Manufacturers should provide the description of the vehicles to EPA in writing to the attention of their EPA certification contact, including the city and highway energy consumption (in kW-hr per 100 miles); and the range of the vehicles (in miles). The energy consumption and the range should be calculated using the procedures contained in Society of Automotive Engineers procedure J1634. The driving range (in miles) is the harmonic average of the city driving range and the highway driving range, weighted 55% city and 45% highway, rounded to the nearest mile as follows:

$$\text{EPA Driving Range (in Miles)} = \frac{1}{\frac{0.55}{\text{City Range}} + \frac{0.45}{\text{Hwy Range}}}$$

Please submit the information in the format shown in the example below:

Carline Name	Type of Battery	Motor Size/Type	Energy Consumption		Driving Range	Veh.Class, Body Type,
			City	Hwy		
AB Electric	Lead-Acid	95 KW AC Induction	40	50	100	4dr-113/13 Large Cars
AB Electric	Nickel-Metal Hydride	45 KW AC Induction	45	45	150	4dr-113/13 Large Cars
CD Electric	Lithium-Ion	62 KW DC	NA	NA	NA	2 dr-85/11 Subcompact

Availability:

AB Electric vehicles are initially available to the U.S. Postal Service in California and Arizona only.

CD Electric vehicles will be available nationwide (initially for lease only) in the late fall of 2001.

Additional information may also be included if necessary to describe your vehicles.

ENCLOSURE 3

Timetable

This enclosure is the timetable for including data in the 2002 Fuel Economy Guide and for the calculation and release of updated fuel economy ranges:

Fuel Economy Guide

Task	Significant Dates	Responsibility
1. Complete emission certification requirements for all model types to be included in the <u>Guide</u> .	August 20	Manufacturer
2. Notify EPA of self-approval of all general label fuel economy values, for all model types to be included in the <u>Guide</u> .	August 20	Manufacturer
3. Compile a list (for each manufacturer) of descriptions fuel economy values, etc., of all model type to be included in the <u>Guide</u> and transmit to manufacturers for their review.	August 20	EPA
4. Complete review of all information provided in "3" above and notify EPA of necessary corrections or concurrence.	August 24	Manufacturer
5. EPA will convey the necessary information to DOE for printing.	August 30	EPA

Fuel Economy Ranges

1. Release to manufacturers the fuel economy ranges to be used on fuel economy labels.	August 31	EPA
2. Ranges required to be included on labels as of this date.	September 16	Manufacturer

EPA will try to include all available information in the Guide, which is submitted to EPA prior to August 30, 2001. August 29, 2001 is the last day for manufacturers to make changes to the EPA computer database or to submit written fuel economy information to EPA for alternative-fueled vehicles and electric vehicles.